

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

MARTIN ROAD IMPROVEMENTS

**SECTION 26A APPROVALS FOR CROSSINGS OF HUNTSVILLE
SPRING BRANCH AND MCDONALD CREEK AND DIKE
CONSTRUCTION ON REDSTONE ARSENAL, ASSOCIATED WITH
FOUR-LANE CONSTRUCTION OF MARTIN ROAD,
WHEELER RESERVOIR, MADISON COUNTY, ALABAMA**

**AND SECTION 26A APPROVAL FOR DIKE CONSTRUCTION AT
RACCOON CREEK WILDLIFE MANAGEMENT AREA,
GUNTERSVILLE RESERVOIR, JACKSON COUNTY, ALABAMA**

Proposed Action and Need

The U.S. Army Aviation and Missile Command (AMCOM) and the Alabama Department of Transportation (ALDOT) propose to widen Martin Road from U.S. 231 to Redstone Arsenal's Patton Road. Martin Road is a major, east-west restricted access thoroughfare on Redstone Arsenal (RSA). This project consists of two sections due to discrete road ownership and subsequent maintenance responsibilities between the agencies proposing the project. ALDOT proposes to widen the road from U.S. 231 to the Redstone Arsenal Gate 1, the eastern section, and AMCOM proposes to widen the road on the RSA installation from Gate 1 to the interchange for Patton Road, the western section. In the eastern section, ALDOT proposes to fill 4.3 acres of wetlands and construct a new bridge across Huntsville Spring Branch. Mitigation for the wetland fill would be provided by construction of a dike on the Raccoon Creek Wildlife Management Area (WMA) in Jackson County, Alabama to seasonally flood 100 acres for the Raccoon Creek WMA waterfowl management project. Approximately 18 acres of this area would be maintained as an emergent wetland to offset the loss of 4.3 acres of wetlands. In the western section, AMCOM proposes to fill 5.35 acres of wetlands and construct new bridges across McDonald Creek and a tributary to McDonald Creek. As mitigation for the 5.35 acres of wetland fill, AMCOM proposes to establish an area of advanced mitigation credits to be used solely for projects on RSA.

A Section 26a approval would be needed for the following actions:

- bridge across unnamed tributary to McDonald Creek,
- bridge across McDonald Creek,
- bridge across Huntsville Spring Branch,
- wetland fills in the floodplain of McDonald Creek and Huntsville Spring Branch,
- dike construction at Raccoon Creek WMA for the eastern section wetlands mitigation, and
- dike construction at Redstone Arsenal for the western section wetland mitigation.

Alternatives

The environmental assessment (EA) prepared by the Federal Highway Administration (FHWA) and ALDOT for *Project A-AD-13(1), Martin Road Improvements from Redstone Arsenal's East Gate to the US-231 Interchange, Madison County* evaluates the environmental consequences of two alternatives: Preferred Alternative and No-Build (No Action). Under the No Build Alternative, the project would not be constructed, although routine maintenance would continue. Under the Preferred Alternative, the "Build" alternative, Martin Road would be widened to a four-lane facility with a grassy median for most of its length. The additional lanes would be added to the south of the existing road and would accommodate current and future traffic demands.

The EA prepared by the AMCOM, *Environmental Assessment for the Widening of Martin Road, Redstone Arsenal, Alabama*, evaluated the environmental impacts of six alternatives, including No Action. The five action alternatives differed in the location of additional lanes to be added to the roadway. Alternative 1, the Preferred Alternative, proposes to add two additional lanes to the south side of the existing Martin Road alignment, separated from the existing alignment by a reduced-size median with a concrete barrier separating the eastbound and westbound lanes. Alternative 2 would add an additional lane to each side of the existing roadway, while Alternative 3 would minimize impacts by using vertical retaining walls on the portion of the roadway over water. Alternative 4 would further minimize fills by constructing an elevated roadway on concrete pilings across the standing water traversed by the road for most of its length. Alternative 5 would place new lanes to the south of the existing lanes, but would have a standard width median with no barriers.

In TVA's review of the Martin Road Project, TVA considered five action alternatives for the entire project in its evaluation. These alternatives are the five described above in the AMCOM EA; each of these five alternatives includes the "Build" corridor in the FHWA EA.

Impacts Assessment

TVA independently reviewed the impacts assessed in the FHWA and AMCOM EAs and confirmed their findings. U.S. Army Corps of Engineers (USACE) issued a statement of findings and Finding of No Significant Impact (FONSI) for each EA and identified the specific wetland mitigation for each section. TVA has also reviewed these USACE documents and confirmed their findings. TVA conducted further assessments, in preparing its own EA, on the impacts of the proposed mitigation sites for the Martin Road project, the dike construction on Raccoon Creek WMA and on Redstone Arsenal. TVA's EA incorporates by reference the aforementioned FHWA, AMCOM, and USACE documents.

TVA reviewed the impacts of constructing a dike and providing additional pumps to seasonally flood approximately 100 acres at the Alabama Department of Conservation and Natural Resources (ADCNR) Raccoon Creek WMA on Guntersville Reservoir near Stevenson, Alabama. Approximately 18 acres of this area would be developed and maintained as an emergent wetland, resulting in a 4:1 offset to the loss of the 4.3 acres filled on Martin Road. Archaeological resources, threatened and endangered species, or floodplains would not be adversely affected.

TVA reviewed the impacts of developing an Advanced Compensatory Wetlands Mitigation Site (ACWMS) or wetland bank, on the south end of Redstone Arsenal

consisting of approximately 51.68 compensatory wetland mitigation credits. The loss of the 1.7 acres of tupelo gum swamp wetlands would be offset at a 3:1 ratio, which would be 5.1 acres or credits. The loss of the 3.65 acres of mixed hardwood bottomland wetlands would be offset at a 2:1 ratio, which would be 7.3 acres or credits. After debiting the site 12.4 acres or credits for the Martin Road wetland losses, 39.28 credits would still be available to Redstone Arsenal for future use. TVA has determined that no archeological resources, endangered or threatened species, floodplains, or prime farmland would be adversely affected.

TVA believes that with the inclusion of standard Section 26a approval conditions, the USACE commitments to construct mitigation wetlands, and the commitments contained in the FHWA and AMCOM EAs, including relocating dwarf trilliums, the subject construction of Martin Road, when added to other past, present, and reasonably foreseeable future actions would not have a significant impact on the wetland functions and values in the Tennessee Valley region. Because of the regulatory requirement that there be no net loss of wetland functions and values, the incremental impact of this project when combined with other actions would not be significant.

Mitigation

TVA concurs with the mitigation identified in the FHWA and AMCOM prepared EAs. TVA believes that the permit conditions and wetland mitigation in the USACE permits are adequate mitigation for the potential impacts to wetlands and aquatic resources. Approximately 18 acres at the Raccoon Creek WMA has been developed and will be maintained as an emergent wetland, resulting in a 4:1 offset to the loss of the 4.3 acres of wetland associated with the widening of Martin Road on the eastern section (ALDOT section). AMCOM will develop an on site Advance Compensatory Wetlands Mitigation Site and this site will be debited 12.4 acres for the loss of wetlands associated with the widening of Martin Road on the western section of the highway (on Redstone Arsenal). Use of these wetland mitigation sites are the condition of U.S. Army Corps of Engineers approvals for the wetland fills. TVA's Section 26a (of the TVA Act) approval is contingent upon successful implementation of Best Management Practices for erosion and sediment control including the TVA General and Standard Conditions 5e, 6a - i. In addition to the commitments required by USACE and ADEM, TVA would require adherence to the following special commitments:

- AMCOM will protect sites 1Ma136, 1Ma139, 1Ma169, the upper portion of 1Ma504/632, 1Ma545, 1Ma633, and 1Ma645, by extensive flagging by the surveyors, fence construction, and monitoring during construction. This is to ensure that no activities (i.e., movement of construction vehicles, etc.) occur in areas where historic properties are located. AMCOM will avoid the upper areas of site 1Ma504/632 by covering the site with crushed limestone fill or some other type of protective layer. AMCOM will coordinate these activities with TVA and will provide documentation of the completion of these activities to TVA.
- Potential impacts to populations of dwarf trillium will be mitigated by relocating populations of the plant that are in danger of being impacted. Plants near the edge of the existing roadway will be marked when they are actively growing in the spring and early summer and relocated to a suitable habitat after they have seeded in late June. Prior to commencement of project construction, ALDOT will report to TVA the status of dwarf trillium populations that are to be relocated.

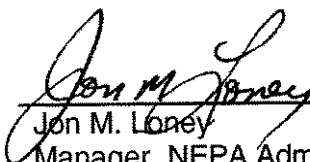
Public and Intergovernmental Review

The FHWA/ALDOT EA on the eastern portion of the project was released for public review on October 14, 1998. No public comments were received. The USACE issued a Joint Public Notice (# 00-07) on January 10, 2000. It was cancelled on February 1, 2000, at the request of the applicant, and then reinstated as Public Notice 00-07B on September 14, 2000. The AMCOM coordinated a preliminary EA for the western section with TVA and other agencies in September 1998. An EA was released for public comment in April 1999. Again, no public comments were received. The USACE issued a joint public notice (#03-02) on March 19, 2003 for the proposed creation of the AMCOM advanced compensatory wetland credit site. The U.S. Fish and Wildlife Service (USFWS) and the Alabama Historical Commission (AHC) provided comments. Initially, AMCOM proposed a 1:2 ratio for the conversion of the temporarily ponded/saturated wetland to a restored tupelo gum swamp wetland, resulting in 47.54 additional credits for the bank. USFWS was concerned that this ratio was too high, because of the potential difficulty in restoring tupelo gum wetlands, the lack of any previous tupelo gum wetland restoration projects, and that this was the enhancement of an existing bottomland hardwood wetland. At a joint USACE, USFWS, and AMCOM meeting, the conversion ratio for the tupelo gum swamp wetland from the existing bottomland hardwood wetland was changed to the 1:1 ratio. The AHC stated they had not reviewed the Phase II survey report for the mitigation area and would issue formal comments after the review. Since then, AHC has reviewed and concurred with the report.


Conclusion and Findings

TVA has independently reviewed the impacts assessed in the FHWA and AMCOM EAs and confirmed their findings. USACE issued a statement of findings and FONSI for each EA and identified the specific wetland mitigation for each section. TVA has also reviewed these USACE documents and confirmed their findings. TVA has decided to incorporate these documents by reference. The State of Alabama Historical Commission concurs with TVA's findings that no historic properties eligible for the National Register of Historic Places will be affected by the undertaking and that the requirements of Section 106 of the National Historic Preservation Act have been met.

Based on the EA, we conclude that the Section 26a approvals for the crossings of McDonald Creek, Huntsville Spring Branch and unnamed tributaries would not be a major Federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This FONSI is contingent upon successful implementation of Best Management Practices, successful relocation of the dwarf trillium, successful creation of 18 acres of wetlands at Raccoon Creek WMA on Gunter'sville Reservoir, and implementation of the AMCOM's wetland mitigation plan and avoidance of the cultural sites in the wetland mitigation area.



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Date Signed